

## ABSTRACT

Ensuring sufficient bias current is provided to a portion of a circuit containing low voltage transistors operating with a high supply voltage. Such a sufficient bias current may be ensured by generating a primary bias current from a low supply voltage and a backup bias current from a high supply voltage, and providing the backup bias current as the bias current if the primary bias current is not present. The primary bias current may be provided as the bias current when the low supply voltage is available. Thus, the backup bias current is provided as bias current in case of undesirable supply sequencing.